

# WATERBODY DATA FORM

ENSR | AECOM

☒ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Other:

Feature ID #: S5ATR002

Stream/Waterbody Name (if known): PONCA CREEK

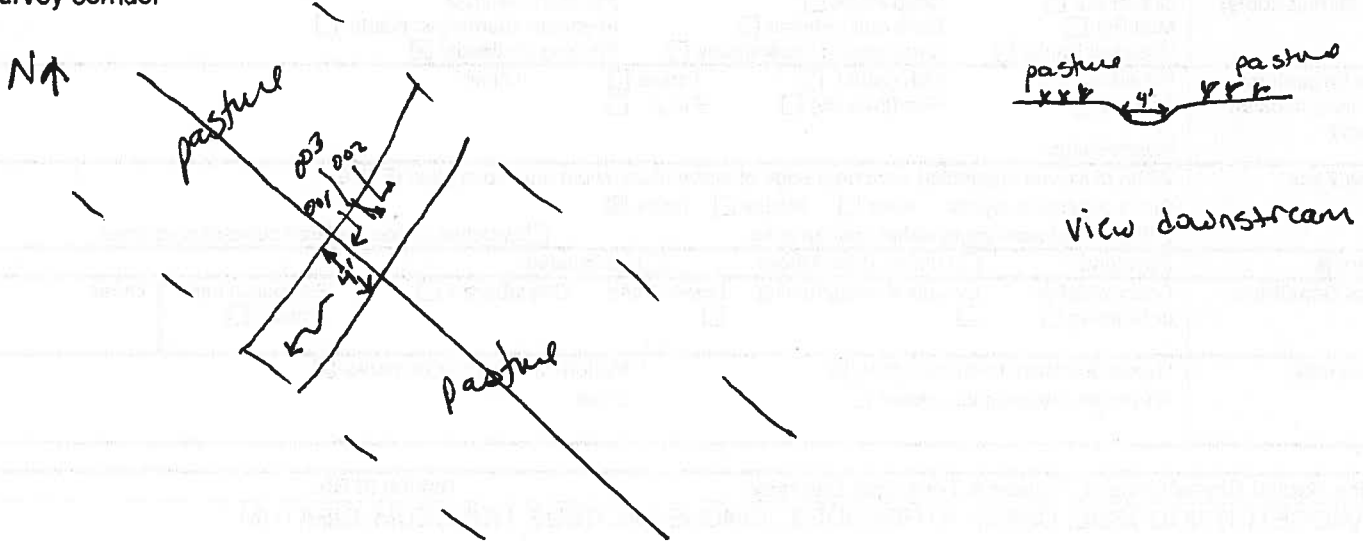
Associated Wetland ID #:

Date: 7/10/08	Project Name & No.: Keystone XL-10623-007-803A	Milepost: 575.3
Investigators: 5A	State/County: SD/ TRIPP	Quad Name: WEWELA CREEK
Logbook No.: 1	Logbook Page No.: 139, 140	Tract No.: ML-SD-TR-11460.000
		Picture No.: S5ATR002_SW,NE,E

## PHYSICAL ATTRIBUTES

### Waterbody Sketch Plan

Please include: Directional & North Arrow, Centerline, Length of feature, Distances from Centerline, Photo Locations, and Survey corridor



Angle of Crossing at Centerline:  $< 90^\circ$

Waterbody Type	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> Borrow Pit <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ag. Ditch <input type="checkbox"/> Other:						
Stream Flow	<input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow <input type="checkbox"/> Very Slow <input checked="" type="checkbox"/> None		Flow type	<input type="checkbox"/> Perennial (Flows year round) <input type="checkbox"/> Seasonal (Continuous flow $\geq$ 3 months) <input checked="" type="checkbox"/> Intermittent (Flows $<$ 3 months) <input type="checkbox"/> Ephemeral (Flows only in response to rainfall)			Direction of Flow where it crosses CL: SW (N, NE, E, SE, S, SW, W, NW)
Subsurface Flow?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown						
OHWM Width (ft.):	4		Sinuosity	<input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering			
Stream Width (ft.)	Top of Bank (at crossing location): 6			Water Surface (at crossing location): 4			
Stream Depth (in.)	<input checked="" type="checkbox"/> 0-3 <input type="checkbox"/> 3-6 <input type="checkbox"/> 6-12 <input type="checkbox"/> 12-18 <input type="checkbox"/> 18-24 <input type="checkbox"/> 24-36 <input type="checkbox"/> 36-48 <input type="checkbox"/> 48-60 <input type="checkbox"/> 60+						
OHWM Indicator	<input type="checkbox"/> Clear natural line on bank <input type="checkbox"/> Wrack line <input type="checkbox"/> Shelving <input type="checkbox"/> Scour <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Bent, matted or missing vegetation <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Water staining <input type="checkbox"/> Soil character changes <input type="checkbox"/> Sediment deposition <input type="checkbox"/> Sediment sorting <input type="checkbox"/> Litter and debris <input type="checkbox"/> Leaf litter disturbed <input type="checkbox"/> Other:						
Bank Height (ft.) (looking downstream)	Left:	<input checked="" type="checkbox"/> 0-2 <input type="checkbox"/> 2-4 <input type="checkbox"/> 4-6 <input type="checkbox"/> 6-8 <input type="checkbox"/> 8+					
	Right:	<input checked="" type="checkbox"/> 0-2 <input type="checkbox"/> 2-4 <input type="checkbox"/> 4-6 <input type="checkbox"/> 6-8 <input type="checkbox"/> 8+					
Bank Slope (looking downstream)	Left:	<input checked="" type="checkbox"/> 4:1 <input type="checkbox"/> 3:1 <input type="checkbox"/> 2:1 <input type="checkbox"/> 1:1 <input type="checkbox"/> Vertical					
	Right:	<input checked="" type="checkbox"/> 4:1 <input type="checkbox"/> 3:1 <input type="checkbox"/> 2:1 <input type="checkbox"/> 1:1 <input type="checkbox"/> Vertical					

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<b>QUALITATIVE ATTRIBUTES</b>					
<b>Water Appearance</b> (check all that apply)	Clear <input type="checkbox"/>	Turbid <input type="checkbox"/>	Sheen on surface <input type="checkbox"/>	Floating algal mats <input type="checkbox"/>	Water Color:
	Slightly Turbid <input type="checkbox"/>	Very Turbid <input type="checkbox"/>	Greenish color <input type="checkbox"/>	Obvious surface scum <input type="checkbox"/>	
Other:					
<b>Stream Substrate %</b>	Silts/ Clay 100%	Cobbles	Bedrock	Sands	Gravel
	Concrete	Muck	Vegetation:		
Other: Explain:					
<b>Aquatic Habitats</b> (check all that apply)	Sand Bar <input type="checkbox"/>	Gravel Riffles <input type="checkbox"/>	In-stream emergent plants: <input checked="" type="checkbox"/> CAREX ARTHENODES,		
	Gravel Bar <input type="checkbox"/>	Deep Pools <input type="checkbox"/>	POTAMOGETUM		
	Mud Bar <input type="checkbox"/>	Bank root systems <input type="checkbox"/>	In-stream submerged plants: <input type="checkbox"/>		
	Undercut Banks <input type="checkbox"/>	Overhanging trees/shrubs <input type="checkbox"/>	Fringing Wetlands: <input checked="" type="checkbox"/>		
<b>Aquatic Organisms Observed</b> (check all that apply)	Waterfowl <input type="checkbox"/>	Fish (adult) <input type="checkbox"/>	Turtles <input type="checkbox"/>	Other:	
	Snakes <input type="checkbox"/>	Fish (juvenile) <input type="checkbox"/>	Frogs <input type="checkbox"/>		
Invertebrates:					
<b>Riparian Zone</b>	Width of natural vegetation zone from edge of active channel out onto flood plain (FT): 0				
	Circle vegetative layers: trees <input type="checkbox"/> shrubs <input type="checkbox"/> herbs <input checked="" type="checkbox"/>				
	<input type="checkbox"/> Significant bare areas within riparian zone <input type="checkbox"/> Evidence of non-buffered concentrated flows				
<b>Tributary is</b>	<input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial (Man-Made) <input type="checkbox"/> Manipulated				
<b>Channel Condition:</b>	Channelization or Braiding <input type="checkbox"/>	Unnatural straightening <input type="checkbox"/>	Downcutting <input type="checkbox"/>	Dikes/Berms <input type="checkbox"/>	Excessive bank erosion <input type="checkbox"/>
	Other				
<b>Disturbances</b>	Livestock access to riparian zone <input checked="" type="checkbox"/>		Manure in stream or on banks <input checked="" type="checkbox"/>		
	Waste discharge pipes present <input type="checkbox"/>		Other:		

Describe Habitat Characteristics, Aquatic & Terrestrial Diversity:

Habitat ID No.:

POTAMOGETON NODOSUS, CAREX ATHERODES, JUNCUS BALTICUS, HORDEUM JUBATUM

CHANNEL PASSES THROUGH LOW LYING CATTLE PASTURE  
LANDOWNER STATES AREA IS VERY WET IN SPRING

Comments (e.g. pipeline crossing angle, construction constraints, erosion potential, existing disturbances, and meanders)

**STREAM QUALITY** High ☐ Moderate ☒ Low ☐